FLOODPLAIN ORDINANCES & INSURANCE RATES

As of October 2003, there are 286 communities in Washington that participate in the National Flood Insurance Program (NFIP). All must adopt and enforce floodplain management regulations of the NFIP and of Washington's Floodplain Management Law at RCW 86.16.

Communities are familiar with the basic Federal and State requirements as they implement their floodplain management chapters on a daily basis. But not all community officials are aware of the direct and often dramatic relationship between how ordinances are enforced and what property owners pay as a consequence of these actions. FEMA and the Computer Sciences Corporation, FEMA's contractor that provides insurance services for the Regional Office, have for many years published an "Insurance Rating Example" which illustrates this relationship. This example is attached and is referred to throughout the ensuing text.

Post-FIRM Construction. This is the basic table that illustrates rating for new construction. Note that this is not a Rate Table from the Flood Insurance Manual used by agents; rather, these are only examples that are used for illustrative purposes. The example here is for a single-family residence in an AE Zone (100-year flood zone with Base Flood Elevations [BFE] provided), for an amount of $100,000 coverage. Rates for residences are divided into two "layers;" the first rate is for the first $50,000 coverage, and the second is for any amount above that (up to $200,000 more for a single-family residence). All structures in AE Zones pay for Increased Cost of Compliance Coverage (ICC), which provides an amount of up to $30,000 to elevate, relocate or take other mitigation action in the event the structure is substantially damaged by a flood (damaged over 50 percent of the structure's market value). All insured structures also must pay the $30 Federal Policy Fee.

For a structure that is built with the lowest floor at the BFE, when the rates and fees are calculated the annual premium works out to $521 for $100,000 coverage. Most communities in Washington require at least one foot of "freeboard," a safety factor requiring new construction to be built above the BFE. In these cases, the insured's premium goes down from $521 to $351, a savings of 33%, which illustrates the actuarial principle "the higher the structure, the lower the rate." If a community requires 2 feet of freeboard (e.g., the City of Everett), the premium for the same structure is only $231, a reduction of 56%. A few communities even require 3 feet of freeboard (e.g., Chelan County), which results in a $196 premium for the same structure, a 62% reduction. Thus, it is clear that the effects of local ordinances and practices that offer greater protection for structures through freeboard requirements also result in substantial savings for property owners on their flood insurance.

The other side of the coin, however, is seen in the same table when a new or substantially improved structure is found to be below the BFE. This should not happen, because all ordinances require elevation to at least the BFE. But if a community issues a variance to the elevation standard, or if the building is constructed incorrectly, the insurance consequences are severe. For the same $100,000 coverage, the premium increases more than threefold, to $1,601 a year if built just one foot below the BFE. Anything lower than one foot below BFE must be sent to FEMA for special review, and the premium continues to increase the lower the structure is built. This is a strong disincentive for issuance by a local official of a variance to the elevation requirement.

Pre-FIRM Construction. For the same single-family residence with $100,000 coverage but for a building that is "pre-FIRM," or built before the date of the FIRM and local ordinance, the premium is $625. Note that this includes a higher ICC charge, reflecting the fact that a Pre-FIRM, or older building would be more likely to use the policy for mitigation purposes (the extra $30,000). Pre-FIRM rates are Zone Rates and do not require an Elevation Certificate (EC) in order to be rated. However, if the property owner does obtain an EC and it shows the structure is at or above the BFE, he/she will be eligible for the cheaper of the Zone Rate or Elevation Rate.

AO Zone Construction. There are only two rates in AO Zones. An AO Zone policy is either rated as having an Elevation Certificate, or as not having one. For the $100,000 single-family residential policy, that works out to an annual premium of $167 with the EC, and $435 without the EC. Note that the EC in AO (and Unnumbered A) Zones does not have to be prepared by a licensed professional surveyor or engineer; it can be filled out by the community official, property owner or owner's representative. Note also that elevating structures higher than the depth number specified on the FIRM in these cases does not result in cheaper insurance.

Manufactured (Mobile) Homes. For $60,000 coverage for a typical manufactured home, the cost is $735 a year for a placement that has the lowest floor at the BFE. This is very high; comparing it to a stick-built home with $100,000 coverage, one can see the annual premium for the manufactured home is $214 more expansive for a lesser amount of coverage. Requiring these homes to be elevated just one foot above BFE reduces the cost to $345, which is a 53% reduction in premium. This reflects the fact that just one foot of water in a manufactured home can cause severe damage to the home, especially if it is not cleaned out quickly. With two feet of freeboard, the cost is reduced by 74%, to just $194 a year.

Commercial. If a commercial (or any nonresidential) building is elevated to the BFE, the insured would pay an annual premium of $1,356 for $150,000 coverage. Elevating the same building just one foot reduces the premium by almost 50%, to $696. Conversely, the same building at one foot below the BFE would have an annual premium of $4,776. An important point here is that nonresidential buildings can be structurally floodproofed (to FEMA's dry-floodproofing standard) but, if they are, one foot is subtracted from the elevation to which they are floodproofed. This reflects the FEMA view that floodproofing is not as effective as elevation. Thus, if a local ordinance requires floodproofing only to the BFE, no credit will be provided for the floodproofing; the building will be rated at one foot below the BFE, and insurance will be very high. One foot of freeboard (or more) in the local ordinance is the only way to avoid placing a property owner in this position.

Structures Outside of Floodplains. Fully 33% of the policies in force in the State of Washington are written for properties outside of the 100-year floodplain. If conventional rating methods are used, the cost for $100,000 coverage for the single-family residence noted above would be $466 in Zones B, C and X outside the Special Flood Hazard Area (Zones A or V). However, a quick and easy-to-write product called the Preferred Risk Policy can be obtained for structures in these zones that reduces the premium for the same amount of coverage to $232, a 50% reduction. A building in these zones would not, however, be eligible if it has received a specified number of insurance claims or disaster assistance in the past.

Increased Insurance Costs for Below-Grade Crawl Space and Inadequate Flood Openings. If the community allows a below-grade crawl space, which FEMA considers to be noncompliant unless a local ordinance contains specific measures, the property owner will be subject to increased insurance costs, called crawl space loading. Likewise, if openings to relieve hydrostatic pressure in enclosed spaces below buildings such as in stem-wall and crawl space construction (residential and nonresidential) do not meet the openings requirements in local ordinances (one square inch for every square foot of enclosure; at least two openings on different sides; openings no more than one foot above grade), the property owner will also be subject to increased insurance costs. Moreover, below-grade crawl spaces and inadequate openings are considered by FEMA to be compliance problems that will be cited during Community Assistance visits (CAVs), and will have to be remedied in order to close the CAV.

Summary. Community officials can save their residents significant insurance costs by having a flood ordinance that requires freeboard, or by at least knowing about the relationship between building elevation and insurance rates and advocating higher elevations if their ordinance does not require them. While the cost savings are important, the increased safety factor with higher elevations is the best argument for advocating them.